### **REMARKS**

These remarks are in response to the Office Action dated May 28, 2008. Claims 1-51 are currently pending in the application. Claims 1-51 stand rejected. Applicant has amended independent claims 1, 3, 5, 7, 12, 19, 23, 34, 39 and 47, and respectfully requests reconsideration of the application as amended herein. Support for Applicant's amendments is found in at least paragraphs [1109], [1110] and [1146] of Applicant's as-filed specification. No new matter has been added.

## 35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on European Pat. App. EP 1 024 661 A2 to Gagnon et al. and U.S. Patent No. 6,310,661 to Arsenault

Claims 1-7, 9-16, 18-20, 22-27, 29-36, 39-44, and 46-50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over by European Patent No. EP 1 024 661 A2 to Gagnon *et al*. ("Gagnon") in view of U.S. Patent No. 6,310,661 to Arsenault ("Arsenault"). Applicant respectfully traverses this rejection, as hereinafter set forth.

To establish a prima facie case of obviousness the prior art reference (or references when combined) must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 985 (CCPA 1974); see also MPEP § 2143.03. Additionally, the Examiner must determine whether there is "an apparent reason to combine the known elements in the fashion claimed by the patent at issue." KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1740-1741, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Further, rejections on obviousness grounds "cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." Id at 1741, quoting In re Kahn, 441, F.3d 977, 988 (Fed. Cir. 2006). Finally, to establish a prima facie case of obviousness there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 1097 (Fed. Cir. 1986).

Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant's disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144.

Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. KSR, 127 S.Ct. at 1742; DyStar, 464 F.3d at 1367.

Furthermore, a prima facie case of obviousness may be rebutted by showing that the art, in any material respect, teaches away from the claimed invention. In re Geisler, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997). Furthermore, it "is improper to combine references where the references teach away from their combination." M.P.E.P. §2145(X)(D)(2) (citing In re Grasselli, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983)).

The 35 U.S.C. § 103(a) obviousness rejections of claims 1-7, 9-16, 18-20, 22-27, 29-36, 39-44, and 46-50 are improper because (1) the references do not teach or suggest <u>all</u> of Applicant's claim limitations and (2) the references *teach away* from their combination.

## All Claim s Lim itations Not Taught or Suggested

Applicant respectfully submits that Gagnon and Arsenault in any proper combination do not teach or suggest "[transmitting/receiving/multiplexing/determining] [information/message/protocol] <u>in-band</u> [with/corresponding to] the broadcast [session/stream]" and the "information [] <u>including physical channel parameters</u>" for "processing [a] broadcast [channel/session/stream]" as claimed in Applicant's amended independent claims 1, 3, 5, 7, 12, 19, 23, 34, 39, and 47.

The Office Action alleges:

... Gagnon et al. does not specifically disclose the information including physical channel parameters.

With respect to claims 1, 3, 5, 7, 12, 19, 23, 34, 39, and 47, Arsenault, in the field of communications discloses adding physical channel parameters to broadcast information (See column 11 lines 36-50 of Arsenault for reference to controlling data streams broadcast from satellites including information specifying the Frequency, polarization, and orbit location, which are all types of physical channel parameters, where a program can be found and for reference to a receiving apparatus using this information to process a broadcast session). (Office Action, p. 11; emphasis added).

Applicant respectfully disagrees. The Office Action alleges that "Arsenault ... discloses adding physical channel parameters to broadcast information", however, Arsenault actually

Applicant respectfully asserts that Applicant's invention as presently claimed recites **physical channel parameter** information <u>in-band</u> with the **broadcast content**. The Office Action concedes that "Gagnon *et al.* does not specifically disclose the information including physical channel parameters." Furthermore, Arsenault clearly teaches that all physical channel parameters are not only "out-of-band" but are also transmitted over a <u>separate</u> satellite link, which is unquestionably "out-of-band."

Specifically, Arsenault teaches:

- [T]he controlling data streams which are broadcast on the satellite(s) not carrying the actual program preferably specify the frequency, polarization, and orbit location where the program can be found. (Arsenault, col. 11, lines 43-47; emphasis added).
- In operation, a broadcaster transmits the entirety of certain programs over a first satellite and controlling data streams on corresponding channels over a second satellite. (Arsenault, col. 9, lines 5-7; emphasis added).

Clearly, Arsenault teaches that physical channel parameters are not only out-of-band, but also occur between <u>separate</u> network element (*i.e.*, a first satellite transmits content and a second satellite transmits controlling data streams). Therefore, any "combination" of Gagnon and Arsenault's out-of-band control would result in a system where the physical channel parameters are still transmitted "out-of-band". Since neither Gagnon nor Arsenault, either individually or in any proper combination, teach or suggest each and every claim limitation, these references <u>cannot</u> render Applicant's claimed invention obvious under 35 U.S.C. §103. Accordingly, the rejection is improper and should be withdrawn.

### References Teach Away from Their Combination

The Office Action, in an attempt to allege a reason from combining the references, relies on modifying Gagnon to include transmission of in-band physical channel parameters. As admitted by the Office Action, Gagnon does not specifically disclose information including physical channel parameters. Therefore, any proper combination of the references for the purpose of providing physical channel parameter information would need to rely upon Arsenault's teaching of physical channel parameters. Accordingly, Arsenault reinforces the

desirability of out-of-band transmission of physical channel parameters by teaching "all controlling data streams can be broadcasted once a day (for example, in the middle of the night) ...." (Arsenault, col. 13, lines18-20). Clearly, transmitting controlling data during odd times (e.g., "middle of the night") is an attempt by Arsenault to more conveniently accommodate a switching receiver to receive the out-out-band transmission of physical channel parameters.

Furthermore, Arsenault teaches of a complex system of multiple antennas for monitoring separate satellites which teaches away from any in-band transmission of physical channel parameters, as claimed by Applicant. Therefore, Arsenault clearly teaches away from the alleged combination of physical channel parameter information in-band with the broadcast content. Since the prima facie case for obviousness under 35 U.S.C. §103 has been rebutted as the combined references clearly teach away from their combination, the rejection is improper and should be withdrawn.

Obviousness Rejection Based on Gagnon in view of Arsenault and further in view of U.S. Patent No. 6,032,197 to Birdwell *et al.* 

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Gagnon in view of Arsenault and further in view of U.S. Patent No. 6,032,197 to Birdwell *et al*. ("Birdwell"). Applicant respectfully traverses this rejection, as hereinafter set forth.

The nonobviousness of independent claim 7 precludes a rejection of claim 8 which depends therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. See <u>In re Fine</u>, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), see also MPEP § 2143.03. Therefore, the Applicant requests that the Examiner withdraw the rejection to independent claim 7 and claim 8 which depends therefrom.

Obviousness Rejection Based on Gagnon in view of Arsenault and further in view of European Pat. No. EP1024661A2 to Rustad et al.

Claims 17, 28, and 45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gagnon in view of Arsenault and further in view of U.S. Patent No. 6,775,303 to Rustad *et al.* ("Rustad"). Applicant respectfully traverses this rejection, as hereinafter set forth.

The nonobviousness of independent claims 12, 23, 39 preclude a rejection of claims 17, 28, 45 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. See In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), see also MPEP § 2143.03. Therefore, the Applicant requests that the Examiner withdraw the rejection to independent claims 12, 23, 39 and claim 17, 28, 45 which depend therefrom.

# Obviousness Rejection Based on Gagnon in view of Arsenault and further in view of U.S. Patent No. 6,580,756 to Matsui et al.

Claims 21, 37-38, and 51 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gagnon in view of Arsenault and further in view of U.S. Patent No. 6,580,756 to Matsui *et al.* ("Matsui"). Applicant respectfully traverses this rejection, as hereinafter set forth.

The nonobviousness of independent claims 19, 34, 47 preclude a rejection of claims 21, 37-38, and 51 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. See In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), see also MPEP § 2143.03. Therefore, the Applicant requests that the Examiner withdraw the rejection to independent claims 19, 34, 47 and claim 21, 37-38, and 51 which depend therefrom.

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#### **ENTRY OF AMENDMENTS**

The proposed amendments to claims 1, 3, 5, 7, 12, 19, 23, 34, 39 and 47 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Further, the amendments do not raise new issues or require a further search. Finally, if the Examiner determines that the amendments do not place the application in condition for allowance, entry is respectfully requested upon filing of a Notice of Appeal herein.

#### **CONCLUSION**

Claims 1-51 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicant's undersigned attorney.

Respectfully submitted,

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